

ABSTRACT

A semiconductor memory includes a core array including a plurality of memory cells, and a redundant array to be substituted for a substitution object area having a defective cell in the core array. In this semiconductor memory, there are provided a substitution address memory which stores an address of a first substitution object area including both sides of the defective cell as a substitution object address, and a redundancy controller which controls to substitute the redundant array for the substitution object area of the core array. When a portion of the first substitution object area is located on the outside of the core array, the redundancy controller controls to substitute the redundant array for a second substitution object area which has the defective cell and is located on the inside of the core array.